

**Savannah River Site
Citizens Advisory Board
Meeting Minutes
March 22-23, 2010
Columbia, S.C.**

Monday, March 22, 2010, Attendance

SRS CAB Members

Dr. Emile Bernard
Manuel Bettencourt
Dr. Don Bridges
Ed Burke
Art Dombay
Kathe Golden
Judith Greene-McLeod
Dr. Rose Hayes
Stan Howard
Dr. Kuppuswamy Jayaraman
Cleveland Latimore
Denise Long
Madeleine Marshall
Tabitha Miller
Joe Ortaldo
Dr. Marolyn Parson
Elizabeth Skyye Vereen
Dr. Jerry Wadley
Sarah Watson

Agency Liaisons

Karen Guevara, DOE-SR
Rob Pope, EPA

DOE/Others

de Lisa Carrico, DOE-SR
Doug Hintze, DOE-SR
Patrick McGuire, DOE-SR
Sheron Smith, DOE-SR
Terry Spears, DOE-SR
Wade Whitaker, DOE-SR
Cathy Amoroso-EPA

Regulators

Heather Cathcart, SCDHEC
Patricia Hydrick, SCDHEC
Van Kiesler, SCDHEC
Tom Rolka, SCDHEC
Carrie Turner, SCDHEC
Mary Varga, SCDHEC
Shelly Wilson, SCDHEC

Contractors

Nancye Bethurem, SRR
Ginger Dickert, SRR
Sonny Goldston, SRNS
Jeanette Hyatt, SRNS
Bill Brizes, V3T
Jenny Freeman, V3T
Aaron Stevens, V3T
Erica Williams, V3T

Stakeholders

Frances Close
Tom Clements
Tedda Howard
Steve Shaffer
Eddie Watson, V3T
Deb Akins, ORAU
Karen Patterson, GNAC

Ms. Karen Guevara, DOE, served as the Deputy Designated Federal Official (DDFO). Ms. Jenny Freeman served as Meeting Facilitator.

The Facilitator welcomed new CAB member Tabitha Miller, and welcomed CAB member Joe Ortaldo back. She reviewed the ground rules, meeting procedures, and the agenda.

SRS CAB members Ric Castagna, Lee Harley-Fitts, Ranowul Jzar, John Snedeker and Alex Williams were unable to attend.

Mr. Bill Brizes stated the 2010 Work Plan has been approved and signed off by DOE, and is included in the packet at their seats.

Strategic and Legacy Management Committee - Jerry Wadley, Chair

CAB member Jerry Wadley introduced himself and his two vice chairs, Madeleine Marshall and Marolyn Parson. He stated there are some outstanding recommendations, with Number 267 changing from pending to open status. He stated there are three open recommendations: Number 261, SRS Budget Process-Improvements; Number 262, Future Missions; and Number 265, Site Performance Metrics. He stated he was the recommendations manager on Number 265, and he hopes to close that at the next committee meeting. He noted there are no recommendations proposed at this time and none in draft.

CAB member Jerry Wadley stated the last committee meeting was held on February 9th in Augusta, with CAB member Madeleine Marshall serving as Chair. He stated there are no open action items, nor any tourist or community events planned at this time. He stated this would be a very active committee, and announced the next committee meeting is scheduled for April 20th from 3:00 to 5:00 p.m. at the Aiken Municipal Conference Center.

CAB member Madeleine Marshall stated at the last committee meeting, there was a presentation regarding the budget and the integrated priority list, which will be updated tomorrow.

Facilities Disposition and Site Remediation Committee - Kuppuswamy Jayaraman, Chair

CAB member Kuppuswamy Jayaraman stated his committee addresses the remediation of contaminated areas at the Savannah River Site as well as the various types of ground water and surface water contamination. He stated the committee deals with issues related to the Federal Facility Agreement, Risk Management and Risk Assessment, the regulatory processes, and other crosscutting issues that relate to environmental restoration. He stated the committee also follows the deactivation and decommission actions taken to reduce the risks and costs following the shut down of an industrial, radioactive, or nuclear facility.

CAB member Kuppuswamy Jayaraman introduced his committee members: Emile Bernard, Ric Castagna, Skyye Vereen and Madeleine Marshall. He invited other CAB members to join the committee.

CAB member Kuppuswamy Jayaraman stated there was a committee meeting on February 9, 2010, where there were two presentations, which he discussed in detail. He announced the next committee meeting would be held on Tuesday, April 20th at the Aiken Municipal Conference Center from 5:30 to 7:30 p.m.

Mr. Bill Brizes asked if there were any updates available on recommendations. CAB member Kuppuswamy Jayaraman stated there were two recommendations that are now closed, and no others to report on.

Nuclear Materials Committee - Judith Greene-McLeod, Chair

CAB member Judith Greene-McLeod reviewed the purpose of the Nuclear Materials Committee. She stated there are currently four open recommendations, one being a joint recommendation with the Waste Management Committee. She stated the open recommendations were Numbers 266, 263, 250 and 259. She stated the committee oversees the SRS nuclear materials that are stored, generated or dispositioned on site. She stated the committee primarily addresses issues involving nuclear materials that have an impact on present or future SRS activities. She stated issues include both SRS legacy nuclear materials and nuclear materials from other sites, involving primarily consolidation, storage, monitoring, disposition, and management of materials.

CAB member Judith Greene-McLeod stated Recommendation Number 266 involves Enriched Uranium Disposition concerning H Canyon scheduling. She stated Recommendation Number 263 involves the Disposition of Spent Nuclear Fuel, Surplus Plutonium and Vitrified High-level Waste, and is a joint recommendation with the Waste Management Committee. She stated Recommendation 259 involved the GAO Report of Processing Additional Nuclear Materials in H Canyon. She stated Recommendation 250 concerns Plutonium Consolidation Consequences. She stated there were three open recommendations concerning plutonium disposition and the spent nuclear fuel alternative study.

CAB member Judith Greene-McLeod stated there was a committee meeting held in Aiken on February 23, 2010. She noted there was a tour earlier that day of the Liquid Waste Management System at the site. She stated the meeting was well attended and discussed the two presentations given at the meeting.

In response to a question concerning a presentation regarding the Integrated Plan for Plutonium Disposition, CAB member Judith Greene-McLeod stated that it is a very "hot" issue and they would like to gather more information concerning it. She stated a presentation concerning the history would be useful, and that there is a pre-draft recommendation in the works concerning the subject.

CAB member Madeleine Marshall addressed the material intended for WIPP, including the statement of intent and the supplemental EIS and asked if there was any concern regarding sensitivity about getting material out of South Carolina in general.

CAB member Don Bridges stated there is a concern. He stated they are waiting for the completion of a study, which is presently in management headquarters for approval. He stated at that point, they should have a better idea of things would proceed.

Mr. Patrick McGuire, Assistant Manager for Nuclear Materials, Department of Energy, stated they have been conducting a number of studies for disposition, both of the surplus plutonium as well as spent nuclear fuel. He stated regarding the WIPP disposition path, the notice of intent would go to the State of New Mexico; public opinion would be sought regarding support or nonsupport of the disposition. He stated the notice of intent would be the first formal data gathering to see whether that's a viable disposition path. He stated they have communicated with DOE entities at Carlsbad. He added there are budget, technical, and stakeholder issues that need to be evaluated before the Department makes a final decision. He stated the experts at both Savannah River and Carlsbad believe that it's a technically viable alternative.

CAB member Rose Hayes stated the CAB was notified at the January meeting that the report sent to Congress on September 5, 2007 had gone forward. She stated that report purportedly told Congress there was an alternative disposition pathway out of the State of South Carolina for plutonium. She recommended the CAB ask for a copy of that report for clarity purposes.

CAB member Joe Ortaldo stated as a CAB, they should remember there is a time urgency regarding decisions made concerning plutonium due to the limited number of places it can go. He stated if it doesn't go to WIPP and has to go to DWPF to be vitrified, there is a finite time when DWPF is going to be running and there are going to be limitations to the amount of plutonium that can go into DWPF.

CAB member Joe Ortaldo asked a question regarding blending down non-PIT plutonium. Mr. Patrick McGuire stated blended down plutonium and blended down uranium are different. He discussed the uranium blending down process. He stated if the plutonium meets the fuel specs, it will go to the MOX plan, and it will be blended. He stated some of the remaining plutonium could also go to MOX. He stated the rest has a lot of contaminants and would not meet the fuel specs and would be declared excess material. He stated that material would be blended so that the plutonium could not easily be retrieved from a security standpoint.

Mr. Tom Clements, Friends of the Earth, asked about the notice of intent and if DOE has a target date for that. Mr. Patrick McGuire stated they are still planning the notice of intent, and they are still moving in the March/April time frame to have that issued.

Mr. Tom Clements stated he is in touch with some of the stakeholders in New Mexico, and he was surprised that EPA was not aware that the notice of intent was going to come out.

CAB member Judith Greene-McLeod stated Carl Everett provided an update at the previous meeting on February 23, 2010 to the Nuclear Materials Committee regarding the Governor of Utah and the Assistant Secretary of Environmental Management's decision to halt all depleted uranium oxide shipments to Utah. She stated the Savannah River Site was beginning to review alternative shipping options, and the one shipment that has arrived in Utah will remain there for the foreseeable future. She stated the other railcars had been loaded with the depleted uranium oxide drums and will remain on site until an alternative disposition path is determined.

Mr. Patrick McGuire outlined the status of the depleted uranium oxide, stating there was one shipment made earlier in the year and was safely unloaded and is temporarily stored in Clive, Utah. He stated there was a decision agreed to between DOE and the State of Utah to not send any more shipments out there. He stated they may have to retrieve that material as future political and technical issues may arise. He stated they feel very confident that it meets all the waste acceptance criteria.

Mr. Patrick McGuire addressed the other depleted uranium oxide on site, stating there is a unit train loaded with depleted uranium oxide ready to be shipped off site. He stated the current options include a facility in Texas, as well as Nevada for temporary storage. He stated a final disposition site would have to be identified and permitted. He stated they are continuing to use Recovery Act funds to palletize the drums.

CAB member Don Bridges asked what was being done with the loaded train. Mr. Patrick McGuire stated the loaded train is sitting as is. He stated the Waste Control Specialists in Texas do have a rail spur, and it could be shipped on rail as it's currently loaded. He stated there is not a formal agreement in place for them to receive the material by rail. He stated that while they can receive the material by truck, the rail option has not been fully evaluated.

Mr. Bill Brizes asked for clarification regarding the waste acceptance criteria. Mr. Patrick McGuire stated the waste acceptance criterion identify a lot of different constituents other than just depleted uranium. He stated the samples taken at the site prior to shipment all show that the Technetium levels are below the required limits. He stated that is not characterized on a drum-by-drum unit, but by railcar.

CAB member Stan Howard asked for clarification on the time limit the depleted uranium could be stored in the railcars. Mr. Patrick McGuire stated they have estimated 12 to 18 months. He stated he felt very confident a decision will be made to either remove the material from the railcars and continue to store it on site, or remove it from the railcars and load it on to trucks for shipment off site, or ship the unit train off site to the final disposition place within the next 12 to 18 months.

CAB member Rose Hayes stated she reviewed a report concerning the sampling issue, and stated the sampling came to approximately one-tenth of one percent. Mr. Patrick McGuire stated they took approximately 33 samples from 33 drums out of a sample set of approximately 33,000. He stated the process, which produced this material had requirements that were very controlled by procedures with specifications on the process itself. He stated the material that went through the process, the uranium, had very stringent controls in place. He noted the high degree of confidence from the process knowledge when the material was produced that an expanded sample size was not necessary.

CAB member Rose Hayes asked what regulation sets the size of sampling. Mr. Patrick McGuire reiterated the controlled process that produced the material, and stated a larger sampling would not be necessary. He stated the sample size used was accurate and reasonable.

CAB member Rose Hayes asked if the statisticians that decided on the sample size were federal employees. Mr. Patrick McGuire stated they were contractor employees, but federal officials oversee that process.

CAB member Ed Burke asked how large the master batch was that went into the drums. He further asked if there were sampling results on every individual master batch from which the conclusion could be drawn that the drums that came out of a single master batch have been sampled. Mr. Patrick McGuire stated the master batch is the overall process. He stated the flow sheets, procedures and equipment are all standardized. CAB member Ed Burke asked if this was a batch or a continuous process. Mr. Patrick McGuire stated it's a continuous process. He further outlined the process. Mr. Patrick McGuire stated there are lab results for every batch produced to ensure the product meets specifications. CAB member Joe Ortaldo stated this came from a continuous process, from the old F Canyon operation where they made plutonium and it's directly tied into the plutonium production, which was very tightly controlled.

CAB member Don Bridges asked if more samples would be taken. Mr. Patrick McGuire stated the Utah facility is taking approximately 70 samples of the 500 plus drums that were already sent. He stated they would be sending it

to two laboratories, one in Tennessee and one in Charleston. He stated based upon the information from that, a path forward would be developed.

Mr. Tom Clements asked how many train cars are available to move the material. He also asked if the material was going to be stored somewhere, and does the ability exist to send two complete rail trains to the site. Mr. Patrick McGuire stated they generally ship a unit train, which is 52 individual rail cars. He stated once the train leaves the site, it will continue to its final destination uninterrupted. He stated the Savannah River Site has 54 rail cars, and Energy Solutions and Paducah each have approximately 10 to 20 rail cars.

Mr. Tom Clements stated he was in Washington, D.C. recently and had a long meeting with Headquarters concerning this issue. He stated he was under the impression that one of the options is to potentially take the material to Clive and offload it for storage off the rail cars and let the disposition decision come at a later time. He stated it sounded like there could be an offloading temporary storage option and the train would come back and be filled again with the storage decision being deferred.

CAB member Emile Bernard stated there is nothing about the material that is unsafe and it is stored in a safe configuration and contact handled. He stated the issue is where it's going to end up.

Mr. Tom Clements asked if all of this material is a byproduct of the reprocessing of the plutonium targets for plutonium 239 production or is some of it for the production of other isotopes. He stated he could not get a clear answer to that question, although he has asked it many times.

Mr. Patrick McGuire stated he did not have that information with him, and offered to follow up. He stated in regards to the options and alternatives, at the present time the material has been offloaded from the rail cars and is being stored on an open storage pad. He stated if the material is to go somewhere else, the drums could be loaded into a Sealand container and stored until a final disposition decision is made.

CAB member Don Bridges stated that material was never used for anything but plutonium production.

~Break~

Waste Management Committee - Joe Ortaldo, Chair

CAB member Joe Ortaldo thanked everyone for the thoughts and prayers that were extended to him during his medical leave.

CAB member Joe Ortaldo outlined the purpose of the Waste Management Committee, which looks at the liquid waste system and the solid waste system on the site. He stated the overall objectives in the liquid waste system are to get all the high-level waste vitrified and ultimately shipped off to a Federal repository. He stated the solid waste program is involved in watching the low-level waste disposal facilities that are on the site, and also shipping off the materials that are not going to stay on the Site (primarily TRU waste and mixed hazardous wastes).

CAB member Joe Ortaldo introduced his committee members: Art Domby, Alex Williams, Ed Burke, Cleveland Latimore, Sarah Watson, Stan Howard and Denise Long. He stated the Waste Management Committee met on February 23rd in Aiken. He stated the main purpose of that meeting was to review Rev. 15 of the System Plan. He stated Pete Hill would further discuss in detail the plan later in the meeting.

CAB member Joe Ortaldo announced the next Waste Management Committee meeting is scheduled for May 4, 2010 at the Municipal Conference Center in Aiken from 3:00 to 5:00 p.m. He stated topics would include the current state of waste on the Site in light of the Yucca Mountain situation, which is at the very least delayed considerably, if not cancelled. He noted the other topic for discussion would include an update on solid waste and the Transuranic Waste Program status of TRU Pad 1.

CAB member Joe Ortaldo discussed the status of the Waste Management Committee's recommendations. He stated they have nine open recommendations, and two joint recommendations. He reviewed each of the recommendations in detail. He stated Recommendation 135 has to do with Annulus Cleaning; Recommendation

162 has to do with Accelerating the Removal of Sludge from the Tanks; Recommendation 211 is related to Tank 48; Recommendation 224 concerns the Closure of Tanks 18 and 19; Recommendation 242 is related to Saltstone; Recommendation 246 deals with Supplemental EIS Concerning Surplus Plutonium Disposition; Recommendation 256 deals with Infrastructure Support for Liquid Waste; Recommendation 258 has to do with Solid Waste, primarily TRU waste; Recommendation 263 is a joint recommendation with the Nuclear Materials Committee having to do with the Final Disposition of Spent Nuclear Fuel, Surplus Plutonium and Vitrified High-level Waste; Recommendation 264 is another joint recommendation having to do with SRS Utilizing the ARRA Funding; and Recommendation 268, which was just approved recently, dealing with the Continuation of the Superfund Training Program. He stated there is one recommendation made to DOE to increase the amount of plutonium that would be put into each DWPF canister. He stated DOE responded with a letter that stated they are increasing that number significantly. He stated that recommendation has been tabled.

CAB member Manuel Bettencourt asked why depleted uranium oxide is not considered a waste and why it is in the Nuclear Materials Committee. CAB member Joe Ortaldo stated by definition, depleted uranium oxide is not a waste as mentioned earlier by Mr. Patrick McGuire. Mr. Patrick McGuire stated depleted uranium oxide is not a waste, but a byproduct. He stated it's under material control and accountability requirements.

Administrative Committee - Sarah Watson, Chair

CAB member Sarah Watson welcomed the new CAB members.

She stated the Sunshine Fund is something that DOE does not support, and therefore the CAB cannot support it officially. She stated the CAB can hold the Sunshine Fund amongst them, and can entertain issues such as birthdays and illnesses, etc., but it would have to be done during breaks and at lunchtime. She stated the fund currently has approximately \$98. She stated no one is compelled to contribute.

CAB member Sarah Watson stated orientation is scheduled for April 21, 2010, and details would be sent to the new members and those who were unable to attend last year's orientation.

CAB member Sarah Watson reminded everyone to submit articles for the upcoming spring *Board Beat*.

CAB member Sarah Watson announced the CAB retreat has been scheduled for October 28 through 30, 2010 in Aiken at Rose Hills Estate.

CAB member Sarah Watson thanked CAB member Art Domby for volunteering for the Speakers Bureau.

Presentation - Speakers Bureau - Art Domby, CAB member

CAB member Art Domby stated that while the Speakers Bureau has been discussed conceptually by this CAB, it was very active a number of years ago, and had a lot of training and presentations. He stated he would be providing a representative presentation. He outlined the setting up of the Speakers Bureau, including who would participate, what the message would be, and what community groups would be interested.

Ms. Karen Patterson stated past speakers have addressed local Aiken/Augusta church groups, Rotary groups, and other local civic and religious organizations.

CAB member Don Bridges asked if it was hard to find audiences in the past. Ms. Karen Patterson stated it was hard to find people who wanted speakers, but once the speakers were on the agenda, they were full of questions and enjoyed the presentations.

CAB member Art Domby stated the CAB support staff has a lot of experience in training and support. He stated training would include such topics as effective speech delivery, learning to overcome nervousness, use of visual aids, and podium etiquette, handling questions, and practice presentations with CAB materials. He stated support staff has very good graphics available. He reviewed a practice presentation, and included samples of information to be provided during a presentation.

CAB member Art Domby discussed the 2035 Completion Projects that review the liquid radiological waste as well as the solid waste on site and the treatment and processing of those waste streams. He also stated there is a lot of soil and groundwater remediation from contaminants of concern. He stated there are 14 groundwater plumes on site, with 12 of the remaining 14 undergoing remediation. He stated there is an Area Completion Strategy that extends to 2031. He stated Facility Deactivation and Decommissioning includes the production reactors that were operated up through 1991. He provided graphics concerning groundwater plumes and area completions.

CAB member Art Domby outlined what the CAB is and how it relates to the SRS today. He stated there are approximately eight or nine active DOE chartered facilities that have site-specific advisory boards that advise DOE on environmental issues. He stated the CAB offers a citizen's perspective and provides input in the form of recommendations on what the CAB believes is in the best interest of the citizens that are affected by the SRS environmental management activities. He stated the CAB receives information relatively early in the DOE process.

CAB member Art Domby outlined the SRS CAB's makeup, which includes diversified representation from South Carolina and Georgia. He stated representatives from DOE, EPA, SCDHEC, and GADNR attend meetings to provide updates and are free to offer their own views and suggestions.

CAB member Art Domby stated the CAB is an active board that provides comments and commendations, and has issued over 260 recommendations.

CAB member Art Domby discussed how people can get involved by attending committee meetings, full board meetings, visiting the SRS CAB website, or become a member of the SRS CAB. He stated the CAB also has an excellent support team.

CAB member Manuel Bettencourt stated previously the CAB had the funds to pay the facilitator to develop a briefing and participate in training. He stated this would be a volunteer effort.

CAB member Emile Bernard stated he liked the idea of team speakers, and suggested the teams should be oriented geographically.

CAB member Jerry Wadley asked about educating the CAB members enough to address audience questions. CAB member Art Domby stated that might be a good reason to go to teams. He also stated it is fair to say you don't know the answer to a specific question, but will research it.

CAB member Manuel Bettencourt stated the primary purpose of the Speakers Bureau is not so much to educate the public on the SRS, as that is the job of the Office of External Affairs. He stated the primary purpose of this outreach is to educate people regarding the CAB.

Ms. Karen Guevara stated that giving some of the general overview of the history and the general mission areas currently at the site would probably include some DOE engagement in terms of helping with the presentation of slides. She stated there could be a mechanism to provide the ability for people to do follow-up questions. She stated citizens could also attend CAB meetings to ask questions that are of interest of them.

CAB member Art Domby stated meetings are also available via webcast at the present time.

CAB member Lee Harley-Fitts stated the sample presentation in itself is very informative.

CAB member Art Domby stated if someone were to ask a question that you don't know the answer to, you can invite him or her to the next meeting.

Ms. Karen Patterson stated when the Speakers Bureau was in place previously, DOE and the CAB were very insistent that the message be consistent. She stated there was one standard presentation. She stated everyone that wanted to be a speaker had to attend training with someone from DOE. She suggested one standardized presentation as opposed to individually created presentations.

CAB member Marolyn Parson suggested the importance of citizen involvement be included in the presentation. CAB member Kathe Golden stated the public seems to have a lack of knowledge regarding SRS. CAB member Rose Hayes suggested members of the Speakers Bureau be provided enough training to address specified issues. CAB member Sarah Watson stated CAB member Art Domby prepared a guide for presentations that will be adjusted based upon suggestions and ideas that are presented. She stated the presentation is CAB based. CAB member Manuel Bettencourt reiterated this program would be self-policing to a certain extent.

CAB member Joe Ortaldo stated the thrust of the presentation should probably concern what the CAB is, but it's inevitable there will be questions regarding the Site. He suggested three-person teams; one experienced CAB member, a relatively new CAB member, as well as someone from DOE.

Mr. Wade Whitaker stated someone from DOE could be a member of the team or perhaps a contractor representative. He stated a benefit from the Speakers Bureau is reaching students who might be interested in the intern program or future employment at SRS.

CAB member Madeleine Marshall stated the organizations in her area that would be interested in a presentation of this type would be the business community such as the Chamber of Commerce or the Lions Club. She stated the key item to them would be the economic impact.

CAB member Rose Hayes stated there are probably numerous organizations that would like to hear this type of presentation. She asked if the earlier Speakers Bureau had targeted any local government entities. Ms. Karen Patterson stated the focus was mostly on the general public.

CAB member Manuel Bettencourt suggested a representative from the Citizens for Nuclear Technology and Awareness visit the CAB and explain their purpose as they have many activities involving local governments and schools. He stated they have breakfasts that are attended by approximately 200 local community people as well as a Speakers' Bureau.

A current member of the CNTA stated the purposes between the two organizations are completely different. She stated the CAB's purpose is to provide advice and recommendations to DOE, while CNTA's purpose is to be pro-nuclear including nuclear medicine and nuclear utilities.

CAB member Denise Long thanked CAB member Art Domby for the wonderful guideline. She stated the presentation might prompt questions that encourage involvement.

Mr. Rob Pope, EPA, stated DOE has made a good effort to go out to communities. He stated there would always be questions that no one in a group or team would know the answer to.

CAB member Kuppuswamy Jayaraman asked what the mission is regarding the Speakers Bureau. CAB member Art Domby stated the fundamental purpose of the Speakers Bureau is outreach of the CAB so the public knows there is a CAB and what it does. He stated it is important to discuss the history of SRS and its current mission and past missions. He stated the main purpose of the Speakers Bureau is to disseminate information about the CAB and what the CAB does.

CAB member Jerry Wadley read a statement from the CAB's Standard Operating Procedures regarding the objectives of the CAB, quoting, "Provide for public involvement in the Board's advisory process by making information available to the public, holding open meetings, communicating efforts and results and creating opportunities for the public to participate in the process."

CAB member Sarah Watson thanked CAB member Art Domby. She encouraged everyone who has additional questions to write them down and submit them to her.

CAB member Sarah Watson stated the mentoring program is continuing, and CAB member Stan Howard would be making more assignments. She stated staff support provided the seat assignments for the meeting in an effort to help the mentoring program.

CAB member Sarah Watson stated the CAB is attempting to go green, and information, notices, and minutes are being communicated via email. She encouraged members to check their email regularly.

CAB member Sarah Watson encouraged those who have not signed up for a committee to review the sheets and sign up.

CAB member Sarah Watson stated the Administrative Committee is responsible for membership replacement, compliance and amendments to the Board's Standard Operating Procedures, nominations and elections of Board officers and public outreach. She invited members to sign up for the Administrative Committee.

CAB member Sarah Watson noted that CAB member Jerry Wadley had his manual with him. She stated members should have their CAB Information manual with them at every meeting.

CAB member Sarah Watson reminded committee chairs to select a vice chair and get that information to Erica Williams.

The Facilitator announced the dates for committee meetings are as follows: Tuesday, April 20, 2010, Strategic and Legacy Management Committee, 3:00 to 5:00 p.m. in the Aiken Municipal Conference Center; Tuesday, April 20, 2010, 5:30 to 7:30 p.m., the Facilities Disposition and Site Remediation Committee; Tuesday, May 4, 2010, Waste Management Committee meeting, 3:00 to 5:00 p.m. at the Aiken Municipal Conference Center; Tuesday, May 4, 2010, Nuclear Materials Committee meeting from 5:30 to 7:30 p.m. at the Aiken Municipal Conference Center.

~Public Comments~

Mr. Tom Clements stated he was a representative with Friends of the Earth, headquartered in the United States, with offices in 72 countries around the world. Mr. Clements stated he was in Washington, D.C. recently doing some lobbying work on various issues related to adequate clean up funds amongst other things. He stated the nuclear weapons budget under President Obama has risen ten percent and the nuclear stockpile dismantlement budget has gone down approximately 30 percent. He stated SRS' connection to nuclear weapons is tritium processing and packaging. He stated one of the meetings he had was with the Defense Nuclear Facility Safety Board. He stated they have requested Congress to increase their staff from approximately 110 employees to 117 employees. He stated he was told the additional seven employees would be engineers based in Washington. He stated they discussed the high-level waste issues at SRS with the board. He asked if there would be an update regarding Recovery Act funds during the meeting.

Mr. Clements stated President Obama's Blue Ribbon Commission on Spent Nuclear Fuel is going to have its first meeting in Washington this coming Thursday and Friday, which includes a 15-minute public comment period allowed at the end of the meeting, which causes concern. He stated he would hope that Commission would learn some lessons from the way the CAB does their business.

Mr. Clements stated in the course of giving presentations, he is often surprised by the lack of education.

CAB member Kuppuswamy Jayaraman stated he is very glad Mr. Clements referred to the lack of knowledge regarding SRS and other sites. He stated he has tried to educate his students throughout the years.

~End of Public Comments~

The Facilitator stated the Executive Committee would be meeting at 5:00 p.m.

Meeting adjourned at 4:30 p.m.

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DOE/Others

Jeff Allison-DOE-SR
Jack Craig DOE-SR
Helen Belencan, DOE-SR
de Lisa Carrico, DOE-SR
Zack Smith, DOE-SR
Doug Hintze, DOE-SR
David Hoel, DOE-SR
Bethany Raines, DOE-SR
Rod Rimando, DOE-SR
Sheron Smith, DOE-SR
Wade Whitaker, DOE-SR
Terry Spears, DOE-SR
Pat McGuire, DOE-SR
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Kim Newell, SCDHEC
Carrie Turner, SCDHEC
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Contractors

Ginger Dickert, SRR
Pete Hill, SRR
Dave Olson, SRR
Fred Dohse, SRNS
Paul Esenstat, SRNS
Teresa Haas, SRNS
Jeanette Hyatt, SRNS
Laurie Posey, SRNS
Paul Sauerborn, SRNS
Monique Rabin-SRNS
Bill Brizes, V3T
Jenny Freeman, V3T
Aaron Stevens, V3T
Erica Williams, V3T

Stakeholders

Nancy Bobbitt
Tom Clements
Francis Close
Tedda Howard
Eddie Watson, V3
Deb Akins, ORAU
John Sylvester, SCDAH/SHPO
Edith Ket- Gel Group
Larry Taake, Gel Group
Karen Patterson, GNAC

Ms. Karen Guevara, DOE, served as the Deputy Designated Federal Official (DDFO).

Ms. Jenny Freeman served as Meeting Facilitator. Mr. Alex Williams led the Pledge of Allegiance for the group.

SRS CAB members Ric Castagna and Ranowul Jzar were unable to attend.

Approval of the Minutes

CAB member Manuel Bettencourt opened the floor for any comments concerning the minutes. There being no comments, he called for a motion to approve the minutes. After receiving a motion and a second, the minutes were approved. CAB member Rose Hayes suggested the audio of the meeting be kept in archive.

The Facilitator reviewed the ground rules, meeting procedures and the agenda.

Department of Energy Update - Karen Guevara, DOE

Ms. Karen Guevara introduced herself as the Assistant Manager at the Savannah River Site for the closure project and DDFO. Ms. Guevara congratulated CAB members who had been reappointed and welcomed the new CAB members. Ms. Guevara invited Mr. Jeff Allison to make a few remarks.

Mr. Jeff Allison stated there have been some changes in senior leadership at the site. He introduced the new acting site leader, Mr. Jack Craig. Mr. Allison outlined Mr. Craig's background.

Mr. Jack Craig introduced himself and gave a brief professional background. He stated he would be present for the day and looked forward to working with the CAB.

Ms. Guevara introduced Mr. Fred Dohse. Mr. Dohse stated he was representing Mr. Garry Flowers who was unable to attend. He welcomed new CAB member Tabitha Miller.

Mr. Dohse stated SRNS has passed six millions hours of work without a lost workday case, and has received awards for that achievement; one from the National Safety Council, and one from the South Carolina Manufacturers Alliance on Plant Safety. He stated the ultimate goal is a workplace with zero incidents and zero safety issues.

Mr. Dohse stated they have Earned Value System Management certification in place, which is required by the Office of Engineering and Construction Management. He stated this is an important milestone in their performance as a company.

Mr. Dohse thanked the CAB for the work they do.

Ms. Karen Guevara introduced Mr. Dave Olson from Savannah River Remediation. She stated Mr. Pete Hill from Savannah River Remediation would be giving a presentation later in the day.

Ms. Karen Guevara stated Zack Smith has taken over the Recovery Act portfolio at SRS and would be present later in the day to address that issue during Rod Rimando's Recovery Act update.

Ms. Karen Guevara stated in terms of general items of note, the Site's second round of public tours is well underway. She stated the public Site tours provide a better understanding of the Department of Energy's facilities and their role in the Cold War.

Ms. Karen Guevara stated the Assistant Secretary and Congressman Clyburn announced a partnership with nine historically black colleges in South Carolina and Eastern Georgia that will provide more than \$21 million for the next three years to develop academic programs.

Ms. Karen Guevara discussed the importance of hydration as a safety precaution. She emphasized the importance of hydration especially in the hot spring and summer months. She stated our bodies are made up of approximately 75 percent water and stated some nutrition experts recommend an ounce of water per day per pound of body weight. She stated if you work in hot environments or engage in strenuous work, there may be times you need more water. She stated additional information on this topic is available on the front table.

Ms. Karen Guevara stated in the area of waste disposition, the SRS continues to make significant progress in treating and dispositioning the liquid and solid waste, and reducing environment risks. She stated to date, approximately 730,000 gallons of waste feed from Tank 49 has undergone processing by the Integrated Salt

Disposition Process, and approximately 1.9 million gallons of liquid waste has been processed at the Saltstone Facility over the past 12 months. She stated the Defense Waste Processing Facility, which has poured 44 canisters since January 1, continues to process both sludge waste as well as concentrated radio nuclide stream resulting from salt waste processing at the integrated salt dispositioning process. She stated a key document that communicates the robustness of DOE's onsite disposal of low-level liquid wastes, the Saltstone Performance Assessment, recently completed an internal review within DOE and has been transmitted to the Nuclear Regulatory Commission for their review. She stated the Tank 48 treatment project continues to make good progress. She stated the design of a fluidized bed steam reformer system for at-tank treatment of the waste in the tank is underway, and approval of this project's critical decision is planned for late 2010. She stated tank recovery is planned for late 2014.

Ms. Karen Guevara stated Mr. Pete Hill would present the latest update of the liquid waste system plan later in the day.

Ms. Karen Guevara stated activities continue to accelerate in the TRU waste program, with a focus on removing at least 5,000 of the 5,200 cubic meters of Legacy TRU waste from the Site under the Recovery Act Program. She stated most of this inventory requires invasive resizing and repackaging of the waste to allow compliant shipment. She stated to date this year, SRS has completed 19 shipments to WIPP with a total volume of 145 cubic meters. She stated shipments are being accelerated with 15 shipments scheduled in April. She stated shipments would be paused until August to build a sufficient shippable inventory, which is expected to come from remediation of TRU waste drums as well as boxes. She stated to date, they have retrieved 170 drums from the culverts on TRU Pad 1, or approximately 20 percent of the total TRU Pad 1 inventory.

Ms. Karen Guevara stated they had recently implemented some additional worker safety controls so they can start removing the higher content drums from the remaining Pad 1 culverts, and they will go to remediation in a glove box type enclosure in F Canyon. She stated they have remediated 133 drums, producing 276 shippable containers since restart of the F Canyon facility in November of 2009. She stated they anticipate approximately 1250 drums would require remediation in this facility to complete the Drum Legacy TRU Waste Project.

Ms. Karen Guevara stated for the miscellaneous TRU waste boxes, they are currently using the truck well of H Canyon to unpack large steel boxes into smaller containers. She stated to date they have completed the unloading of seven of the large boxes; and recently engaged H Canyon to remediate some of those boxes into the shippable form for WIPP. She stated they have produced 23 compliant containers for shipment to WIPP.

Ms. Karen Guevara noted the last update concerning TRU waste is on the 200 cubic meters of TRU waste they do not anticipate completing through the Recovery Act. She stated this volume is expected to offer more challenges and they are working through those to ensure the safety of the workers. She noted a plan addressing those 200 cubic meters of Legacy waste is expected to be in place by the end of this fiscal year, October 2010.

Ms. Karen Guevara stated construction of the Salt Waste Processing Facility by the Parsons Infrastructure and Technology Group continues. She stated Parsons has completed the walls up to 116 feet. She stated they are now focused on completing the decking and walls to an elevation of 124 feet. She stated completion of the Salt Waste Processing Facility construction is scheduled for late 2012, with hot operations starting in July 2013.

Ms. Karen Guevara stated there are two SRS projects relating to pollution prevention success led by the Savannah River National Lab that have been honored by the U.S. Department of Energy (DOE) Office of Environmental Management (EM) for achievements in pollution prevention. SRS constructed wetlands to reduce environmental impacts, and won DOE EM's "Best in Class" in the category of sustainable design in green buildings, as a "Best in Class" winner in the DOE EM pollution prevention program. She stated it would be submitted for consideration to the Department of Energy's STAR Honors Program, which recognizes achievements from across all of DOE's program offices as well as the White House for the "Closing of the Circle" Award.

Ms. Karen Guevara stated in addition, the project of detoxification of outfall water using natural organic matter took honorable mention in the waste pollution prevention category.

Ms. Karen Guevara stated SRS is complete with the consolidation of surplus non-PIT plutonium from across the DOE complex. She stated disposition of the plutonium is being accomplished at Savannah River's HB Line Facility, with the dissolved plutonium then sent in batches to the Defense Waste Processing Facility for vitrification.

Ms. Karen Guevara stated the Site continues to dissolve and process unirradiated highly enriched uranium shipped from sites across the DOE complex. She stated they are continuing to dissolve and process in the H Canyon, then the highly enriched uranium is blended with natural uranium supplied by the Tennessee Valley Authority (TVA) to make low-enriched uranium, which is then delivered back to the TVA vendor for the production of commercial reactor fuel for use by TVA.

Ms. Karen Guevara stated they expect all of the unirradiated highly enriched uranium planned for the enriched uranium disposition project will be dissolved by September 2010 and shipped as low enriched uranium by mid 2011. She stated shipments of the low enriched uranium are approximately 40 percent complete presently.

Ms. Karen Guevara stated preparations are underway to begin the processing of foreign and domestic research reactor fuel, and processing of the fuel will begin shortly after the dissolution of the unirradiated highly enriched uranium. She stated the transition from unirradiated material to spent nuclear fuel is expected by the end of September 2010.

Ms. Karen Guevara stated they have completed 368 or approximately 71 percent of the 515 waste units, with the decommissioning of 249 or approximately 25 percent of the 985 facilities that are expected to undergo D&D.

Ms. Karen Guevara stated footprint and risk reduction activities funded by the Recovery Act continue, including remediation of the M Area, which will be completed during the Recovery Act period. She noted this would represent the second largest industrial area completed at the Savannah River Site with T Area being completed back in 2006.

Ms. Karen Guevara stated decommissioning activities continue for the P and R Reactors as well as remediation of the R Area Ash Basin and the P and R Area railroad cask cars. She stated removal of each of the reactor's large metal Gantry cranes that sit atop those reactors is underway, making the first obvious difference in the physical landscape. She stated Rod Rimando would provide an update later in the day.

Ms. Karen Guevara stated last July DOE held a public scoping meeting on the long-term management and storage of elemental mercury. She stated approximately 20 members of the public attended the meeting, with four offering opposing comments for long-term storage of elemental mercury at the Savannah River Site. She stated the Department is evaluating five DOE sites, including SRS as well as one Army depot and one private entity location. She stated DOE issued the draft EIS this week, which indicates that the Department's preferred alternative is use of the Waste Control Specialists' Facility in Texas. She stated a public hearing on the draft EIS was held earlier in the month, and they would keep the CAB informed.

CAB member Manuel Bettencourt asked if the 200 cubic meters of TRU that is problematic concerns a packaging problem. Mr. Terry Spears stated there are a variety of reasons for the problems. He stated some of that material is too dense to characterize and some of it contains items that can't be shipped to WIPP that have to be removed.

CAB member Don Bridges asked about the hiatus on TRU waste until August. Mr. Terry Spears stated there is a process for getting the material from the storage location at SRS, get it remediated, get it characterized for shipment, certified and then get it on the trucks and shipped to WIPP. He stated through time much of the inventory of shippable waste has been built up. He stated well over 30,000 drums of waste have been shipped to WIPP, and most of the easy inventory has been harvested. He stated it becomes more difficult to get it through the process and ready to send off to WIPP. He stated it would take a little time to restore it to a point where it makes it cost effective to bring the central characterization project back on and effectively use their time. He stated they are fully utilizing assets, and trying to do everything in a cost effective manner.

CAB member Rose Hayes asked during the enriched uranium blending process before shipment out to reactors, what is the source of the natural uranium. Mr. Pat McGuire stated the uranium is domestic and meets the specifications and the high purity content that a nuclear reactor requires.

CAB member Rose Hayes asked where the ore supplies are. Mr. Pat McGuire stated it's from a variety of locations throughout the country. He stated the uranium program in the United States is very well controlled in regard to price, quantity, suppliers and the users of it.

CAB member Rose Hayes asked if there would have to be an international resource in the future. Mr. Pat McGuire stated the spent fuel that would be processed at Savannah River is the material that is onsite or that could possibly be swapped with the Idaho site.

Environmental Protection Agency Update – Mr. Rob Pope, EPA

Mr. Rob Pope stated the EPA has hired two new project managers, one being Cathy Amoroso, who was present. Mr. Pope outlined Ms. Amoroso's background. He stated the other new manager is Rachel Hall, and outlined her background.

Mr. Pope stated a Regional Administrator had not yet been appointed.

Mr. Pope updated the Superfund Job Initiative, stating they continue to have meetings with DOE and DOE contractors concerning the next round.. He stated Savannah River Remediation has committed 15 jobs for graduates of the second round of SJTI. He stated SRNS has remained very engaged. He recognized Ms. Christy Shufford and Ms. Barbara Schmoke who have been very helpful. Mr. Pope stated they are working on setting up a meeting with some of the SRNS subs to discuss the SJTI. Mr. Pope stated they have not been able to really engage with several contractors at this point. Mr. Pope stated another round of SJTI would be happening soon.

Mr. Pope stated Rod Rimando would be giving a detailed brief later. He stated everyone should receive the Environmental Bulletin for Mr. Paul Sauerborn almost on a daily basis. He stated the bulletin includes such things as notifications that decision documents are available for review.

Mr. Pope stated that Mr. Doug Hintze would be giving a briefing later in the day, and discussing budget and planning for 2011. He stated the EPA is very pleased with the way things are going. He stated there is concern in 2012 and years beyond as the funding ends. He encouraged everyone to stay engaged.

South Carolina Department of Health and Environmental Control – Shelly Wilson, SCDHEC

Ms. Shelly Wilson welcomed the new CAB members. She thanked Mr. Jeff Allison for all of his service.

Ms. Shelly Wilson stated the state budget is bad and is getting worse. She stated the DHEC budget has been cut from 150 million to 100 million. Ms. Shelly Wilson stated the DHEC environmental side normally has about 1,000 positions and they have already lost over 100 of those positions, or approximately ten percent. She stated additional cuts could mean additional impact on staff.

Ms. Shelly Wilson congratulated the CAB for going green and using less paper. She stated Earth Day is April 22 and Governor Sanford has proclaimed that entire week as Earth Week. She stated there will be a number of events that week, and described some of them. Ms. Wilson passed out bookmarks containing a website for the green guide.

Ms. Wilson introduced Kim Newell. Ms. Kim Newell welcomed the new CAB members. She stated there are two local Earth Day events, and described them in detail. She offered copies of Eco-Jeopardy for any teachers present.

CAB member Denise Long asked if there is a site for North Augusta and Aiken where Earth Day events would be held, and Ms. Kim Newell provided locations and times for the activities. CAB member Emile Bernard asked if

there are plans for any programs in other South Carolina locations. Ms. Kim Newell stated there is a website for all Earth Day activities offered.

Ms. Kim Newell stated the local ESOP program data report is complete.

CAB member Joe Ortaldo asked with respect to the budget if the DOE support were still there for all the DOE-related DHEC activities. Ms. Wilson stated that for the Federal activities, specifically SRS, there are Federal dollars that support oversight. She stated there would be a strain on state-funded activities performed by DHEC. CAB member Don Bridges asked if the cuts were attrition or lay-offs. Ms. Wilson stated they have been some of each.

~Public Comments~

Mr. Tom Clements, Friends of the Earth, stated in a follow-up to his comments the previous day regarding the Blue Ribbon Commission that there is an announcement in the daily Federal Register regarding the Thursday meeting of the Blue Ribbon Commission. He stated the Department is pursuing the webcasting of the meeting. He stated the public comment period has been lengthened as well. He encouraged those present to log on to energy.gov to see if the meeting is webcasted.

CAB member Judith Greene-McLeod referred to Ms. Karen Guevara's comments regarding winning the Best in Class Award for DOE, and stated the Savannah River Ecology Lab had some restructuring, and part of the research there contributed to that Best in Class award.

CAB member Denise Long stated that everyone on the CAB thanks Jeff Allison for everything he does for the CAB and invited him to return to the CAB meetings.

~End of Public Comments~

Chair Update - Manuel Bettencourt, Chair

CAB member Manuel Bettencourt invited CAB member Don Bridges to take the floor.

CAB member Don Bridges recognized those who have had birthdays between January and March, and extended birthday wishes to them.

CAB member Manuel Bettencourt stated he attended Waste Management 2010 in Phoenix earlier this month and presented a paper and an oral presentation. He stated it was a very interesting international seminar with approximately 600 people in attendance. He encouraged those present to sign up for committees. He stated that when you email the CAB staff, please use the CAB staff emails rather than emailing individuals. He stated all travel emails go to Ms. Erica Williams. He encouraged everyone to fill out his or her information sheets. He stated CAB member Don Bridges participated in the SSAB Chairs' telephone conference call last week. He stated Judith Greene-McLeod and he would be attending the SSAB Chairs meeting at the end of April in Oak Ridge.

CAB member Don Bridges asked what the response was regarding the green look on email for the meeting today, and how was it received. He was advised there were only two people who didn't check their emails.

CAB member Marolyn Parson stated when she printed the minutes, her copy contained corrections.

Facilitator's Update - Jenny Freeman, Facilitator

The Facilitator stated there are no pending recommendations, with 18 open which were discussed yesterday in detail. She stated 250 recommendations have been closed for a total of 268 recommendations. She stated there are no recommendations awaiting response from the Department of Energy, and none have been approved since the January 2010 meeting, and one has been closed since that time. She stated she had available the body of the recommendations available for review.

CAB member Jerry Wadley stated the Strategic and Legacy Management Committee has one pending recommendation that was just done at their last meeting.

Nuclear Materials Committee - Judith Greene-McLeod, Chair

CAB member Judith Greene-McLeod stated the Nuclear Materials Committee focuses on issues that involve nuclear materials that have an impact on present or future SRS activities, and the issues include spent nuclear fuel program activities, both foreign and domestic, nuclear materials management and nuclear materials integration. She stated the committee is interested in the consolidation, storage and disposition related to the Legacy materials that were once part of the Nuclear Weapons Production Cycle that are no longer needed for their original purpose, but are not considered waste.

CAB member Judith Greene-McLeod stated the last committee meeting was held on February 23, 2010. She stated there was an excellent tour of the liquid waste facility. She stated the meeting included an update on H Canyon documented safety analysis, which was requested in Recommendation 259. She stated the second presentation was an update on the plutonium disposition and spent nuclear fuel environmental policy act, NFEPA, and the notice of intent to prepare a supplemental environmental impact statement. She referred to the discussion that took place the previous day.

CAB member Judith Greene-McLeod noted the committee does have four open recommendations. 250, 259, 263 and 266. She stated Recommendation 263 is a joint recommendation with the Waste Management Committee. She stated Recommendation 263 involves processing additional nuclear materials at H Canyon, spent nuclear fuel, surplus plutonium and vitrified high-level waste final dispositions. She stated Recommendation 266 involves enriched uranium disposition and Recommendation 250 involves the plutonium consolidation consequences.

CAB member Emile Bernard asked what plutonium consolidation entails. CAB member Judith Greene-McLeod stated it is the fact the plutonium is being brought to Savannah River Site and stored for security purposes. CAB member Don Bridges stated instead of having several storage locations throughout DOE's complex, all the material is stored at Savannah River Site to cut down on the security and overview costs related to plutonium.

CAB member Judith Greene-McLeod invited those present to join the committee. She stated the next committee is scheduled for May 4, 2010 in Aiken and that the agenda is still being finalized.

CAB member Judith Greene-McLeod stated there is a recommendation in the works on plutonium disposition. She stated they have started working on a draft, and will be sending it out for comment.

CAB member Judith Greene-McLeod stated CAB member Rose Hayes had requested information on Public Law 107-107, and they will take that as an action item to follow up.

CAB member Kathe Golden stated she hears things referred to as waste, some as byproducts and some referred to as nuclear materials, and wanted to know the difference. CAB member Judith Greene-McLeod stated her understanding is it has to do with the origin of the material.

CAB member Don Bridges stated things that can be found useful in the nuclear business would be called nuclear materials. He stated, for example, depleted uranium has many constructive purposes.

Ms. Shelly Wilson stated there is a definition in the law for waste. She stated in the Federal law it's the Resource Conservation and Recovery Act and in state law it's the South Carolina Hazardous Waste Management Act. She also referred to the Atomic Energy Act for byproduct material.

CAB member Rose Hayes asked if Legacy materials are considered waste. She stated her understanding is it could be weapons grade.

CAB member Don Bridges stated Legacy has been around a long time and has been generated as 50 years of operations were developed.

Ms. Shelly Wilson stated there is no actual definition for Legacy in the law, but the term waste is defined.

CAB member Manuel Bettencourt stated there is a tab in the CAB Information Manual called SRS Waste and Material Terms. He stated many of those terms are covered in there.

~**Break**~

Waste Management Committee - Joe Ortaldo, Chair

CAB member Joe Ortaldo once again thanked everyone for his or her cards, prayers, and kind words. He displayed the charter of the Waste Management Committee. He stated they have both solid and liquid waste, with the ultimate objective to get the materials shipped off the site and sent to the proper place.

CAB member Joe Ortaldo introduced his committee members: Alex Williams, Art Domby, Ed Burke, Cleveland Latimore, Sarah Watson, Stan Howard and Denise Long, and stated they are looking for additional people to serve on the committee.

CAB member Joe Ortaldo stated the Waste Management Committee met on February 23, 2010 in Aiken, and had a tour of the high-level waste facilities. He stated the meeting was primarily a presentation of the Rev. 15 of the System Plan, and stated Pete Hill would soon be giving a presentation.

CAB member Joe Ortaldo stated the next meeting will be held on May 4, 2010 at the Aiken Municipal Center at 3:00 p.m. He stated the primary topic at the committee meeting will be the Transuranic Waste Program as well as a session that will be addressing questions concerning some of the waste and the delay of the Federal repository.

CAB member Joe Ortaldo stated the committee has nine open recommendations, with two joint recommendations as well. He stated each Committee member is going to take one recommendation and compare it to the status of the System Plan. He stated four or five recommendations should be closed within the next several months.

CAB member Joe Ortaldo introduced Mr. Pete Hill.

Presentation - System Plan Revision 15 - Pete Hill, Savannah River Remediation

Mr. Pete Hill stated he manages the Technical Planning and Risk Management Group for Savannah River Remediation. He stated SRR is the liquid waste contractor at SRS. He provided an agenda of his presentation regarding Revision 15 of the System Plan.

Mr. Pete Hill discussed safety issues, and stated in order to be successful in closing the waste tanks, they need to continue with the strong safety and security tradition that has been established at the site.

Mr. Pete Hill outlined the liquid waste overview. He stated starting in 1954, there were two canyons operating on the site that extracted special nuclear materials from spent fuel. He stated anything that was not extracted was sent to the tank farms as waste. He stated there is approximately three million gallons of sludge in the tanks today. He discussed the salt solution. He stated after the material was processed in the evaporators, some of it would precipitate into a hard salt cake. He stated there are approximately 16 million gallons of the hard salt cake and approximately 17 million gallons of salt solution in the tanks farms today. He discussed the processes surrounding the salt waste and sludge waste.

Mr. Pete Hill stated Rev. 15 of the System Plan includes commitments that were made by SRR. He stated some of the objectives incorporated in Rev. 15 of the System Plan are to close the 22 remaining Type 1, 2, and 4 tanks in an eight-year period.

CAB member Don Bridges asked what the driver for Rev. 15 is. Mr. Pete Hill stated there are several things, primarily the contract transition and the fact that SRR identified technologies that they were going to deploy to accelerate tank closure and maximize DWPF throughput. He stated the System Plan is periodically updated in accordance with their contract, which requires an annual update.

Mr. Pete Hill stated SRR identified ways to double the baseline throughput in the ARP/MCU process to process 40,000 gallons a week out of the feed tank. Mr. Hill stated SRR is going to deploy a suite of technologies to increase DWPF's throughput in a two-step process. He discussed these technologies in detail.

Mr. Pete Hill provided a "gear chart" to communicate how highly integrated the liquid waste system is, and explained it in detail. He stated the "gear chart" does not show underlying gears such as when preparing sludge batch, each batch of soluble salts creates approximately a million and a half gallons of water that needs to be evaporated. He stated increasing sludge prep without the employment of different technologies would also require an increased evaporation capacity. He stated the production of DWPF canisters also produces a recycle stream back to the tank farm that has to be evaporated.

Mr. Pete Hill stated, as previously mentioned, SRR identified some key technologies that they are going to deploy in an effort to accelerate the whole gear chain in an integrated fashion such as melter bubblers, DWPF process enhancements, enhanced chemical cleaning and rotary microfiltration. He discussed these key technologies.

CAB member Don Bridges asked if the proprietary technology would leave when SRR's contract expires. Mr. Pete Hill deferred to Mr. Dave Olson who responded the technology is an intellectual property owned by Energy Solutions and they own the technology and not the deployment. He stated the technology stays resident with them, and the Department of Energy owns the deployment aspect including the installation, design and application to the DWPF melter.

CAB member Joe Ortaldo asked if it could be used throughout the Department of Energy or if it's just limited to DWPF. Mr. Dave Olson stated Vitreous State Lab actually identified this for application at West Valley and they have also been engaged with PNNL at WTP project at Hanford with a potential application there.

CAB member Rose Hayes stated the CAB was informed that some of the new technologies are technologies without track records that have been tested in simulated conditions. She asked which technologies have their origins in simulated and which ones are AREVA.

Mr. Pete Hill stated the enhanced chemical cleaning process used a proprietary process owned by AREVA to destroy the oxalates in the cleaning solution before the sludge solids are precipitated into the receipt tank. Mr. Pete Hill stated enhanced chemical cleaning is owned by an integrated subcontractor, AREVA, and it is a technology that they have used hundreds of times in the commercial nuclear industry for cleaning steam generators and other components prior to replacement. He stated they have done real waste testing and the process is capable of performing as needed.

Mr. Pete Hill stated these specific bubblers had been used in radioactive service at SRS approximately ten years ago in a mixed waste melter that was used in A Area. He stated the same bubblers have been used with simulated waste in the testing for Hanford.

CAB member Jerry Wadley asked if the bubblers would be back-fitted into the current melters or would there be new melters. Mr. Pete Hill stated the bubblers are back-fitted into the current melter.

CAB member Jerry Wadley asked if that would require a shutdown for a period of time. Mr. Pete Hill stated there would be a two-week outage for bubbler installation. He stated the melter would be kept hot.

Mr. Pete Hill discussed Rev. 15 inputs including the ARP/MCU processing rate of 40,000 gallons per week out of the feed tank when feed is available, batch qualification requiring two months between batches, the ARP and MCU facilities being permanently shutdown no later than six months prior to the startup of SWPF, and that ARP and MCU facilities will operate within the curie projections of the Liquid Waste Processing Strategy. Mr. Pete Hill stated there is a contract requirement that the total volume of waste processed with interim processing cannot exceed what was evaluated in the salt waste determination, which is eight million gallons.

Mr. Pete Hill stated the assumption for Rev. 15 of the System plan is that the Salt Waste Processing Facility starts up in May 2013. He stated those tie-ins would require a four-month outage at DWPF beginning in February of

2013. He stated SWPF would process 3.75 million gallons in its first 12 months of operation, and six million gallons per year thereafter.

CAB member Joe Ortaldo asked if SWPF were delayed for some reason, would they be able to continue to operate MCU and not be limited by curies or gallons of liquid previously mentioned. Mr. Pete Hill stated the current contract only allows them to process up to 5.2 million gallons through ARP/MCU. CAB member Joe Ortaldo asked if there were a delay at SWPF, what would have to be done to keep running ARP and MCU. Mr. Pete Hill deferred to Mr. Dave Olson. Mr. Dave Olson stated there are two limits as it relates to the interim salt processing operation, one being the curies that would be generated into saltstone. He stated presently the facility is performing at a decontamination level beyond expectation. He stated there would need to be two exchanges, one between the Department of Energy and the contractor to get contractual allowance to continue operating that process. He stated the contractor would have to determine whether there is anything to do to that process line to run it longer than its current three to five-year design life. He stated there would also have to be interaction with the Department and South Carolina DHEC relative to the volume limit.

CAB member Art Domby asked in terms of the Waste Determination 3116 has DOE looked at amending the prior waste determination to increase the volume. Ms. Ginger Dickert stated there is no plan at this time to revise the waste determination, and they are going through an evaluation with the Department presently. She stated the concern is the risk surrounding the curies.

CAB member Joe Ortaldo asked if everyone is starting to work early enough that there won't be a hold up if SWPF is delayed. Ms. Ginger Dickert stated they are already working those processes not only at the Site, but with Headquarters as well.

CAB member Kuppuswamy Jayaraman stated that ARP/MCU facilities are going to be permanently shut down six months prior to the start of SWPF, and SWPF is going to become operational in May 2013. He stated it was earlier stated that ARP/MCU throughput would be doubled to 40,000 gallons per week. He asked why there is a hurry to increase the output from ARP/MCU. Mr. Pete Hill stated the baseline plan was for 20,000 gallons per week out of the feed tank through ARP/MCU, but that did not process the full eight million gallons that was evaluated in the waste determination. He stated the purpose of operating the interim processes is to allow them to continue to operate DWPF. He stated between Rev 14 and 15, there was a slide from September 2012 to May 2013 of SWPF, and in order to compensate for that delay and continue to operate DWPF and make the tank closures, they need to get as much as allowed through ARP/MCU. He stated increasing the throughput has given them the ability to maximize that working space to keep DWPF running.

CAB member Don Bridges asked what the long-range outlook was on working space in the tank. Mr. Pete Hill stated right now, they are around 36 million gallons in storage, with a working space between three and four million gallons. He stated in order to prepare a gallon of salt cake in the tank farm to be fed through ARP/MCU, they had to add three gallons of water to dissolve it and another gallon to dilute it to the right sodium molarity.

Mr. Pete Hill stated they are on track regarding Tank 48, and the material would be processed by December 2014. He stated they are installing some low-level waste storage tanks to feed saltstone over at the Saltstone Facility, and would allow them to utilize Tank 50 once that's completed.

Mr. Pete Hill stated they are going to run DWPF at its maximum capacity all the time. He stated this is a significant change from the assumption in Rev. 14 of the System Plan. He displayed a comparison between Rev. 14 and Rev. 15 of the System Plan, and discussed them in detail. Mr. Pete Hill reviewed the life cycle impact between System Plan Rev. 14 and System Plan Rev. 15.

Mr. Pete Hill discussed tank closure milestones, and reviewed the tank closure schedule.

CAB member Kathe Golden referred to the increased DWPF processing rate on slide 11 to 325 canisters per year in August of 2010. She stated that means the modification would be made to DWPF in the year 2010 so that from that time forward, the increase could be made as opposed to the 325 canisters being poured in fiscal year 2010. Mr. Pete Hill stated the bubblers are installed in August of this year, and on September 1, they should be able to pour at a rate of 325 canisters per year.

Mr. Pete Hill referred to the SRR tank operational closure schedule. He stated the next two tanks slated for closure are Tanks 18 and 19. He stated they are in the process of doing a final cleaning on Tanks 5 and 6. He stated they are actively doing waste removal in Tanks 4, 8 and 12 as part of their sludge batch preparation. He stated they would be starting waste removal in Tanks 7 and 13. He stated they are also starting the documentation work to begin closing tanks in F Tank Farm. He stated they are actively working on initiating a subcontract to do the cleaning on the Tank 16 annulus. Mr. Pete Hill outlined SRR's approach in detail.

Mr. Pete Hill summarized his presentation, and stated the System Plan Revision 15 was developed based on an SRR proposal to utilize key technology deployment and innovations, complete sludge processing in 2023, salt processing completed in 2030 or before, and they are on track to execute Rev 15 of the System Plan in FY 2010.

CAB member Art Domby thanked Mr. Pete Hill for a very comprehensive, detailed and understandable presentation. He referred to the Liquid Waste System Plan Rev 15, and stated it looks at three different alternative assumptions, the 2015 salt waste processing start up, additional PU disposition and the salt only canisters at the end. He asked if when Rev 16 comes out, how would the additional plutonium disposition read. Mr. Pete Hill stated the sensitivity case was looking into receiving a full five metric tons of PU. He stated they would be able to increase waste loading, which would have a net effect of reducing approximately 220 canisters.

CAB member Joe Ortaldo stated the plutonium is plutonium that couldn't go the MOX, and this is related to trying to get as much plutonium into the DWPF stream and vitrified as early as possible.

CAB member Don Bridges asked if Rev. 15 has the five metric tons of PU in it. Mr. Pete Hill stated it did not in the base case.

CAB member Rose Hayes stated the CAB asked at an earlier meeting that the CAB be apprised of the total number of curies on the site and how the total number was affected by the various operations. Mr. Pete Hill stated 19 million curies have been put in glass, and the DDA is approximately 400,000 into saltstone, with MCU being less than that. He stated there are approximately 380,000,000 curies in the tanks.

CAB member Joe Ortaldo thanked Mr. Hill.

Presentation - Savannah River Site Public Tours - Teresa Haas and Laurie Posey, SRNS

Ms. Teresa Haas introduced herself as the Community Relations Manager for Savannah River Nuclear Solutions and introduced Ms. Laurie Posey, who is the Visitor Program Coordinator.

Ms. Teresa Haas stated as background, up until last year, the site had not conducted public tours since September 11, 2001. She stated in 2008, they felt they should reexamine that policy, and with the help of Mr. Jeff Allison, they were able to start with a pilot program last year.

Ms. Teresa Haas outlined the reasons and objectives to do a public tour program such as giving the public a look "inside the fence," to enhance the appreciation for current work and future work, and showcase the nation's newest national laboratory as well as the ecology lab.

Ms. Laurie Posey explained the tour, which starts at the Center for Hydrogen Research where guests arrive and are badged, receive a Savannah River Site overview, a point of entry briefing, go through a security check and board the bus for the tour. She stated there are two stops, with one at the Savannah River Ecology Lab where they see a live animal demonstration. She stated the guests then board the bus and continue on to the Savannah River National Laboratory, M Area, B Area, F Area, E Area, stopping at H Area for a break, and on to S Area, J Area, Z Area, C Area, and then to Ellenton. She stated they then return to the Center for Hydrogen Research, conclude the tour, collect the badges and survey forms.

Ms. Teresa Haas stated there are 23 tours scheduled for 2010, and within 48 hours all tours were full. She stated that survey forms are collected after each tour, and performance is tracked as well as the guests' feedback. She reviewed some comments that they had received from guests.

Ms. Teresa Haas outlined the requirements to tour the site.

Ms. Teresa Haas stated the Aiken Standard did a great editorial regarding the tour program.

Ms. Teresa Haas reviewed some tour statistics for calendar year 2009. She stated they gave 14 public tours, with almost 600 visitors. She stated the total tours conducted, including mission related tours were 187 for a total number of visitors over 3200.

Ms. Teresa Haas stated they were very pleased to be able to offer the public tours. She provided each CAB member with a tour bag.

CAB member Denise Long asked if there would be an increase in tours in the next year. Ms. Teresa Haas stated they would evaluate that.

CAB member Alex Williams asked if the golf course or the old burial ground are included in the tour. Ms. Teresa Haas stated they do ride by the old burial ground.

Ms. Kim Newell asked for a phone number for those who do not have access to the Web. Ms. Teresa Haas stated they encourage people to use either public libraries or friends or families with computer access. She stated they could provide a phone number if those options are not available.

CAB member Don Bridges asked if there were any negative comments. Ms. Teresa Haas stated the comments include the desire to see more of the site, going into the facilities, or getting off in Ellenton to explore.

~Public Comments~

There were no public comments.

~End of Public Comments~

~Break~

Strategic and Legacy Management Committee - Jerry Wadley, Chair

CAB member Jerry Wadley introduced his vice-chairs, Madeleine Marshall and Marolyn Parson.

CAB member Jerry Wadley stated the Committee has four outstanding recommendations with one pending and three open.

CAB member Jerry Wadley stated the last committee meeting was in Augusta on February 9, 2010, and there are no outstanding action items from that meeting.

CAB member Jerry Wadley stated the committee is involved in strategic issues relevant to the future of the Savannah River Site. He stated specific areas of interest are the development and deployment of technology, the SRS budget decision-making process, future land use, Legacy management long-term stewardship, historic preservation, and relevant national environmental policy.

CAB member Jerry Wadley stated the next committee meeting would be on April 20, 2010 from 3:00 to 5:00 p.m. at the Aiken Municipal Conference Center.

CAB member Jerry Wadley introduced Doug Hintze.

Presentation - Budget Update and Integrated Priority List - Doug Hintze, Assistant Manager for Integration and Planning, DOE-SR

Mr. Hintze outlined the purpose of his presentation concerning the FY 2010 Appropriation and the FY 2011 President's Budget Request.

Mr. Hintze displayed a summary of the Savannah River Site, and emphasized the budget for EM. He stated the funding for 2010 and 2011 is pretty consistent. He noted Federal Program Direction is the money that goes to the salaries, travel and training for the federal staff. He stated there is no direct funding to the National Lab, and that the site gets funding from other sources, with a total National Lab budget of approximately \$200 million. He briefly discussed the NNSA appropriation.

Mr. Hintze reviewed the 2008 certified baseline from which the planning bases for the years 2009 through 2014 was developed. He reviewed the priorities in the baseline, and noted they have changed. He stated they were redoing the baseline on both the Savannah River Remediation and Savannah River Nuclear Solutions. He reviewed the project baseline summary for several projects.

Mr. Hintze reviewed a comparison of the certified baseline to the President's Budget Request and annual appropriation; with a projected spend from the Recovery Act. Mr. Hintze stated that for FY 2011, the budget is around \$1.4 billion, but with the projected Recovery Act funds, it increases to approximately \$1.6 billion.

Mr. Hintze reviewed the integrated priority list, which is a combined list of activities included in the President's Budget Request for FY 2011 and the authorized ARRA funding. He stated some things have been added to the list this year, including the modular salt processing and the enhanced low-activity waste disposition that will help in continuing the acceleration of the liquid waste program.

Mr. Hintze stated the information he discussed was for the 2011 IPL, and the information regarding the 2012 IPL should be available in a month or so for review.

CAB member Don Bridges asked what the CSSC program was. Mr. Hintze deferred to Mr. Pat McGuire. Mr. Pat McGuire stated it's the Container Storage and Surveillance Capability Project. He stated they have an existing project in place, the K Interim Surveillance Project, concerning the storage of all the plutonium in the K Area Facility to ensure that the material can be safely stored for up to 50 years where they do destructive and non-destructive surveillances on the material. He stated while the CSSC program was being designed, they needed an interim capability in place. He stated K Area is about a \$90 million a year program to do receipts, storage, surveillance, managing as well as shipping the material over to H Area for final disposition.

CAB member Jerry Wadley asked if there were any priorities for the projects. Mr. Doug Hintze stated they are doing it all; so there is no priority. He stated priorities would include safety and compliance with the law.

CAB member Jerry Wadley asked what the Cold War artifacts entail. Mr. Doug Hintze stated there is a requirement to identify things that could potentially be saved for historical purposes. He stated there might eventually be a visitor's center there that would house some artifacts.

CAB member Jerry Wadley asked if there is a list of artifacts and if the CAB has any input. Mr. Paul Sauerborn referred to the Cold War Historic Program, and stated the National Historic Preservation Act of 1966, which was revised in 2000, drives it.

CAB member Joe Ortaldo stated it appears the funding in 2010 and 2011 is slightly less than the certified baseline, but with the addition of the stimulus money, the gap is filled somewhat. Mr. Doug Hintze stated that was correct.

CAB member Madeleine Marshall asked if the activities on the integrated priority list were fully funded for FY 2011. Mr. Doug Hintze stated normally when you look at the request versus the actual appropriations it's fairly close.

CAB member Marolyn Parson asked if the same activities on the integrated priority list would appear in previous presentations. Mr. Doug Hintze stated they are not the same since there are two brand new projects included in this presentation. CAB member Marolyn Parson stated it would be a nice graphic to show the significance of the Recovery Act. Mr. Doug Hintze stated the chart does not show the specific dollars associated with each area to know exactly how much is being spent in each of those areas. Mr. Doug Hintze added CAB member Marolyn Parson's suggestion to his action item list.

CAB member Kuppuswamy Jayaraman asked what would be the impact on the progression of the works as well as the general nature of the organization when Recovery Act funds end. Mr. Hintze stated no one knows what the impact is going to be, and there is a concern regarding 2012, 2013 and 2014.

CAB member Art Domby asked how much of a change the saltstone activities are from the 2008 baseline. Mr. Doug Hintze stated the change was the new contract. He stated the bid included an acceleration knowing the planned funding.

CAB member Jerry Wadley introduced Mr. Rod Rimando.

Presentation - American Reinvestment and Recovery Act - Rod Rimando, DOE-SR

Mr. Rod Rimando introduced himself as the Deputy Director for the Savannah River Recovery Act Program. He introduced Zack Smith, a former Federal Project Director for Salt Waste Processing Facility. Mr. Smith stated he has enjoyed working on SWPF and is looking forward to working on ARRA.

Mr. Rod Rimando stated the Recovery Act was enacted for economic stimulus and job creation. He stated the initial goal upon ARRA was saving and creating 3,000 jobs and in January that goal was exceeded with the number being 3,225. He stated with the approval and authorizations from the Assistant Secretary to proceed with some major work, that number would continue to rise over the next several months.

CAB member Alex Williams asked how many of those positions are held by former retirees. Mr. Rod Rimando stated he did not have the percentage or the number, but during the initial planning there was an attempt to reach out to former employees due to their expertise, but that has since changed and they are reaching out to a different group of people.

CAB member Kuppuswamy Jayaraman stated one of the goals of ARRA was achieving manpower. He stated each organization has to look at the manpower problem from their perspective. He expressed concern regarding focusing on manpower as opposed to focusing on the environmental clean up. Mr. Rod Rimando stated they are not creating jobs for the sake of creating jobs or spending money for the sake of spending money, but rather a large reason why the investment was made at Savannah River was because they were able to demonstrate that there are related mission activities at SRS that can be executed and at the same time employ people and make smart investments. He stated there is a relationship between the mission objectives and the ability to be able to create the jobs and spend funds wisely.

CAB member Joe Ortaldo asked how saved jobs are defined. Mr. Rod Rimando stated because of the budget shortfalls anticipated, had the Recovery Act funds not been directed to the site, they would have been forced to let some people go.

Mr. Rod Rimando stated as far as funding, there is \$1.6 billion broken up into five different accounts; TRU and solid waste, P and R Area completion projects, the Site wide clean up, liquid waste, and M and D Area clean up work.

Mr. Rod Rimando reviewed the life of the spending, and stated \$501 million has been spent through the end of February, or approximately 31 percent of the total budget. He stated at the end of this fiscal year, based on the performance baseline, \$905 million dollars, or just over half of the funding will be spent. He stated at the end of FY 2011, it will be \$1.5 billion, and the balance will be the TRU program where the balance of the funds will be spent.

Mr. Rod Rimando reviewed the contracts, and stated one of the reasons the jobs are available is due to the contracting strategies of SRNS and SRR. He stated SRNS to date has awarded \$271 million worth of contracts utilizing both small businesses and local businesses.

CAB member Jerry Wadley asked what was considered a local business. Mr. Rimando stated local refers to the CSRA, the Central Savannah River Area. CAB member Madeleine Marshall asked what the current definition of a small business is. Mr. Rimando stated an 8A qualification is basically the amount of the employees, the award of the contracts, and the time period. He stated he does not know the numbers. It was suggested the Small Business Administration defines it as less than 500 employees.

CAB member Joe Ortaldo asked if the small and local business numbers include mostly manpower that are working for subcontractors, people working on the site, and they are part of the jobs created. Mr. Rod Rimando stated that it's a combination of time and materials, with time being services provided.

CAB member Don Bridges asked for clarification regarding the disparity between the two contractors. Mr. Rod Rimando stated it's basically a function of their budget, with SRNS having approximately \$1.4 billion compared to SRR, which has \$200 million.

Mr. Rod Rimando stated Savannah River Site has the most diverse portfolio of work, touching almost every mission area. He stated it's not just limited to environmental restoration and D&D, but also includes waste disposition as well as nuclear materials and liquid waste. He stated the portfolio is exciting and complex with a lot of moving parts. He stated SRS has a very good Federal staff and contractors and are executing the work very well. He reviewed footprint reduction in detail, including new targets created.

Mr. Rod Rimando discussed the TRU program, noting the performance baseline and the path forward. He stated they are working with Carlsbad and other experts to disposition the balance of the Legacy waste.

Mr. Rod Rimando discussed tank closure, waste treatment, salt disposition integration and facility operations. He reviewed the decommissioning of P Reactor and R Reactor as well as the heavy water components test reactor.

Mr. Rod Rimando discussed various accounts such as solid waste disposition, accelerated TRU waste disposition, liquid waste system recapitalization, P Area and R Area completion general plant projects and operations, P Reactor decommissioning project, P Area Ash Basin remedial action project, R Reactor decommissioning project, and R Area Ash Basin remedial action project.

CAB member Kathe Golden asked if the R Area Ash Basin is the same as the burning rubble pit. Mr. Rod Rimando stated they are different.

Mr. Rod Rimando reviewed the M Area and D Area completion general plant projects and operations, site wide completion general plant projects and operations, which is a catchall account and a large account, and the heavy water components test reactor decommissioning project.

Mr. Rod Rimando summarized by stating the objectives are being met by employing people, contributing to the local economy, and getting the work done.

CAB member Madeleine Marshall stated the last time Mr. Rod Rimando spoke to the CAB, one of the topics was addressing the safety issues that had occurred over the previous couple of months. She stated there has been no news regarding continuing concerns. She asked if the safety situation is under control. Mr. Rod Rimando stated the contractor went through their voluntary stand down, reviewed all the work processes and reanalyzed their hazards associated with the various activities and slowly released work. He stated almost all the work has been released for execution.

CAB member John Snedeker referred to the funding profiles for the near term and the relationship to the 3,000 plus jobs that have been added to the work force, and asked what the profile would look like after the ARRA funds have been expended. Mr. Rod Rimando stated there would be a reduction in the work force. He stated as

the mission activities are completed, the services would no longer be needed. He stated they are able to help workers refine their skills and make them more marketable.

CAB member Emile Bernard asked for clarification regarding the dismantling of HWCTR. Mr. Rod Rimando stated the reactor vessel and the steam generator would be removed, with everything left below grade. CAB member Emile Bernard asked if the reactor was highly contaminated. Mr. Rod Rimando stated the reactor facility itself didn't operate at very high levels. Mr. Rob Pope stated the details of what is planned and investigated are included in the Engineering Evaluation and Cost Analysis, which has been put out for public comment and is available.

~Break~

Facilities Disposition and Site Remediation Committee - Kuppuswamy Jayaraman, Chair

CAB member Kuppuswamy Jayaraman stated the committee deals with the remediation of contaminated areas, especially ground and surface water contamination and issues related to the Federal Facility Agreement, risk management, risk assessment, regulatory processes and other cross-cutting issues that relate to environmental restoration. He stated the committee is also concerned with deactivation and decommissioning actions taken.

CAB member Kuppuswamy Jayaraman stated Committee membership is open, and introduced the Committee members as Emile Bernard, Skyye Vereen, Ric Castagna, Madeleine Marshall and Tabitha Miller.

CAB member Kuppuswamy Jayaraman stated the committee does not have any open or pending recommendations. He stated their last meeting was on February 9, 2010 in Augusta where two presentations were given. He stated the next Committee meeting would be held on Tuesday, April 20, 2010 at the Aiken Municipal Conference Center from 5:30 to 7:30 p.m. where two presentations will be given.

CAB member Kuppuswamy Jayaraman introduced Monique Rabin, who is a design authority engineer of area completion projects of Savannah River Nuclear Solutions.

Presentation - Chemicals, Metals, and Pesticides Pits - Ms. Monique Rabin, SRNS

Ms. Monique Rabin stated she was pleased to present on chemical, metals and pesticides pit, a waste unit that has been undergoing remediation for some time. She stated her presentation is geared towards the final remediation action, which was electrical resistance heating. Ms. Monique Rabin introduced Wade Whitaker, who is involved in the project. Ms. Monique Rabin stated she has been on site for approximately 20 years, mostly in the environmental remediation area.

Ms. Monique Rabin stated the project cost was \$4.2 million. She stated they are ARRA funded since April of 2009.

Ms. Monique Rabin reviewed the acronyms, noting Tetrachloroethylene, PCE, is the main contaminant, which is part of a suite of contaminants called volatile organic compounds, VOCs.

Ms. Monique Rabin discussed the location of the CMP pits on the site, noting it's on a remote location within SRS. She stated there is no surface water contamination at CMP pits. She stated there were seven pits, which were a designated disposal area for SRS and operated back in the 70's. She stated because of the waste that was disposed of in the pits, there was some leakage and contaminant migration into the ground water. She explained each pit was designated for a particular type of contaminant.

CAB member Kathe Golden inquired about the size of the pits. Ms. Monique Rabin stated the pits were approximately 15 feet wide and approximately 200 feet from end to end. Ms. Monique Rabin stated the pits are located approximately 1500 feet from Pen Branch, causing the surface water to become an area of concern. She stated they have not detected contaminants in the surface water, but continue to monitor it.

Ms. Monique Rabin discussed surface soil, and stated they had PCB and pesticide contamination due to the staging of the soil in the area. Ms. Monique Rabin described subsurface soil, and noted they found Tetrachloroethylene and Dichloromethane after a characterization and risk assessment.

Ms. Monique Rabin stated in the groundwater, there was found primarily Tetrachloroethylene and also Carbon Tetrachloride, Dichloromethane and Trichloroethylene. She stated those contaminations of concern are above the maximum contaminant levels, and therefore above drinking water standards.

Ms. Monique Rabin reviewed a time line regarding CMP pits, noting there have been a number of activities, which she summarized in detail. She stated the pits were operated from 1970 to 1979 as a designated disposal area. She stated the site went in and did a removal action in 1984. She stated in 1995, a formal RCRA and CERCLA characterization was started. She stated a mixture of horse manure and molasses caused a reaction that concluded by cleaning up the pesticides and the PCBs in the Ballast Area.

Ms. Monique Rabin described the process of electrical resistance heating, a technology that was developed at Savannah River Site in 1995 in M Area and was then applied in the commercial world. She stated it was also used in Oak Ridge and through borrowing equipment from Oak Ridge, they used the equipment at the CMP pits. Ms. Monique Rabin further displayed and defined the electrical resistance heating for DNAPL.

CAB member Jerry Wadley asked if there is an alternative to the electrical resistance heating method. Ms. Monique Rabin stated they had the solid vapor extraction system, which would have taken a lot of time for removal from the clays. She stated they are targeting the subsurface contamination that acts as a continual source to the groundwater. She described remedial alternatives and discussed the safety issues surrounding the electrical resistance heating method.

Ms. Monique Rabin displayed an overhead picture of the construction process. She stated the wells were drilled in December of 2006, and each electrode well was installed in a 12-inch boring. She discussed the pits area, pointing out the trenches. She further examined the overhead photo, discussing various areas and the various permits required and compliance issues. She displayed an overhead photo upon construction completion, and described the transformer, the safety fence, the well field, the treatment system for the condensate, and the electrolyte injection tank.

Ms. Monique Rabin stated there was a lot of monitoring data, which was used to determine progress. She stated the remediation goal was 30 milligrams per kilogram in the soil. She stated confirmation samples were not taken until work was complete, and there was a lot of process monitoring used to determine when work was complete. She described in detail the performance monitoring processes.

Ms. Monique Rabin stated over 2,300 pounds of PCE has been extracted. Ms. Monique Rabin stated there are two soil vapor extraction units operating.

CAB member Don Bridges asked if they knew how much contaminant was left. Ms. Monique Rabin stated they have taken confirmation samples in the most contaminated areas and they are well below the remediation goal.

Ms. Monique Rabin stated in regard to the timeline concerning the project, heating was started in March of 2008 and it was turned off in November 2008 when moving from one array to the next array. She stated the SVE system was tweaked and they continued to pull a vacuum on the subsurface soil until March 2009, and then turned it off and started dismantling the system. She stated this past December 65 soil samples were taken from three borings at the most contaminated areas. She stated the maximum hit was 1.8 milligrams per kilogram, and the goal was 30.

Ms. Monique Rabin stated all equipment has been dismantled and it is being dispositioned with some of it being held in storage. She stated a formal monitoring report would be submitted in June of every year to EPA and DHEC.

CAB member Jerry Wadley asked if most of the work was done without Recovery Act funds. Ms. Monique Rabin stated that was correct, it was done without those funds.

CAB member Jerry Wadley asked for a description of the site presently. Ms. Monique Rabin stated as part of the final action, there is a land use control implementation plan. She stated the area would be re-graded, have positive drainage, and it will be a grassy area with markers in accordance with the land use control implementation plan. She stated there are a lot of wells, equipment, and equipment pads that need to be disposed of.

CAB member Jerry Wadley asked if there was a restoration plan in place for re-vegetation. Ms. Monique Rabin stated they are addressing that presently.

CAB member Stan Howard asked what material is used for the electrodes that are put in the ground. Ms. Monique Rabin explained the electrodes are a piece of angle iron with an electrical cable attached. CAB member Stan Howard asked if the electrodes are removed. Ms. Monique Rabin stated the electrodes are abandoned in place.

CAB member Emile Bernard asked if there was an approximate amount extracted compared to the amount that was disposed in the pits. Ms. Monique Rabin stated they are reluctant to provide estimates of what might be in the soil due to difficulty in measuring. She stated as part of the groundwater modeling report, they had to assume from the soil sampling and a review of the records, that contaminant transport model assumed there was 1,500 pounds. She stated they assumed that 1,500 pounds of VOCs would continue to contribute to the groundwater contamination. She stated they extracted 2,300 pounds after that.

CAB member Don Bridges asked what the next application for this technology would be. Ms. Monique Rabin stated it has been used commercially, and there are no specific plans at SRS.

CAB member Kuppuswamy Jayaraman asked to review the electrical resistance heating for DNAPL removal, and stated the permeability is very low in clay. He asked how the droplets of the electrolyte reached through the clay layers. Ms. Monique Rabin stated the electrolyte was designed as a piece of angle iron with graphite surrounding it. She stated it wasn't intended to saturate the clay because it was already saturated, but they wanted to keep the interface moist.

CAB member Kuppuswamy Jayaraman thanked Ms. Monique Rabin for the excellent presentation.

CAB member Kuppuswamy Jayaraman reminded those present of the upcoming Committee meeting and asked those interested to join the committee.

Administrative Committee - Sarah Watson, Chair

CAB member Sarah Watson stated equipment has been purchased to view/attend committee meetings online to help support e-meetings. She stated for budget reasons, the CAB would continue to try consecutive meetings, which conserves travel time and allows the opportunity to attend two meetings on the same day.

CAB member Sarah Watson reminded everyone to update their contact information, and stated it's important for staff to have valid information. She also reminded everyone to turn in their travel vouchers if they have not already done so.

CAB member Sarah Watson stated the purpose of the Sunshine Fund is to support CAB members during illness, hospitalizations or the passing of a loved one. She stated the CAB members created it and it's not something that DOE will support. She stated it would continue to be supported and sustained by the CAB members. She stated the operation of the Sunshine Fund would be handled during breaks, lunchtime, or after a board or committee meeting.

CAB member Sarah Watson stated the orientation is scheduled for April 21, 2010, and details would be sent to any new members.

CAB member Sarah Watson stated the CAB retreat has been scheduled for October 28 through October 30, 2010 in Aiken at Rose Hill Estates. She stated it would be all day Thursday and Friday, as well as a half-day on Saturday.

CAB member Sarah Watson thanked CAB member Art Domby again for his efforts in compiling and presenting on the Speakers' Bureau. She stated the Administrative Committee would have a meeting specifically regarding the Speakers' Bureau. She encouraged everyone to submit his or her suggestions and think about volunteering as a speaker. She stated there would be a script available as well as training.

CAB member Sarah Watson stated CAB member Stan Howard would be providing more information regarding the mentoring program at the next meeting.

CAB member Madeleine Marshall asked for clarification regarding closing recommendations. CAB member Sarah Watson stated the Administrative Committee is also scheduling a meeting dealing with issues concerning DOE and processes that the CAB may have had in the past and procedures that the CAB is using. She stated they would do a comparison and bring those things into compliance with DOE.

CAB member Sarah Watson stated in an effort for the CAB to go green, they are trying to utilize the email system more. She asked everyone to update their email information if they have not done so, and to check email on a more frequent basis.

~Public Comments~

Mr. Steve Shaffer stated he has applied to be a member of the CAB. He stated his family moved to Williston, South Carolina in 1952, and his mother started employment there in 1983, and passed away in 1986. He stated her death was deemed a result of her employment at Savannah River Site. He stated he also still owns property in that area and is very interested in what the CAB does to preserve the environment in that area.

~End of Public Comments~

The Facilitator thanked the CAB for their hard work. She thanked the presenters and Ms. Karen Guevara and Mr. Doug Hintze, Co-DDFOs. She thanked the agency liaisons, and the sound guys, Clay and Scott. She also thanked Erica, Aaron and Bill.

Meeting adjourned at 4:00 p.m.